

Applicant: Yutaka TAKATA, et al.

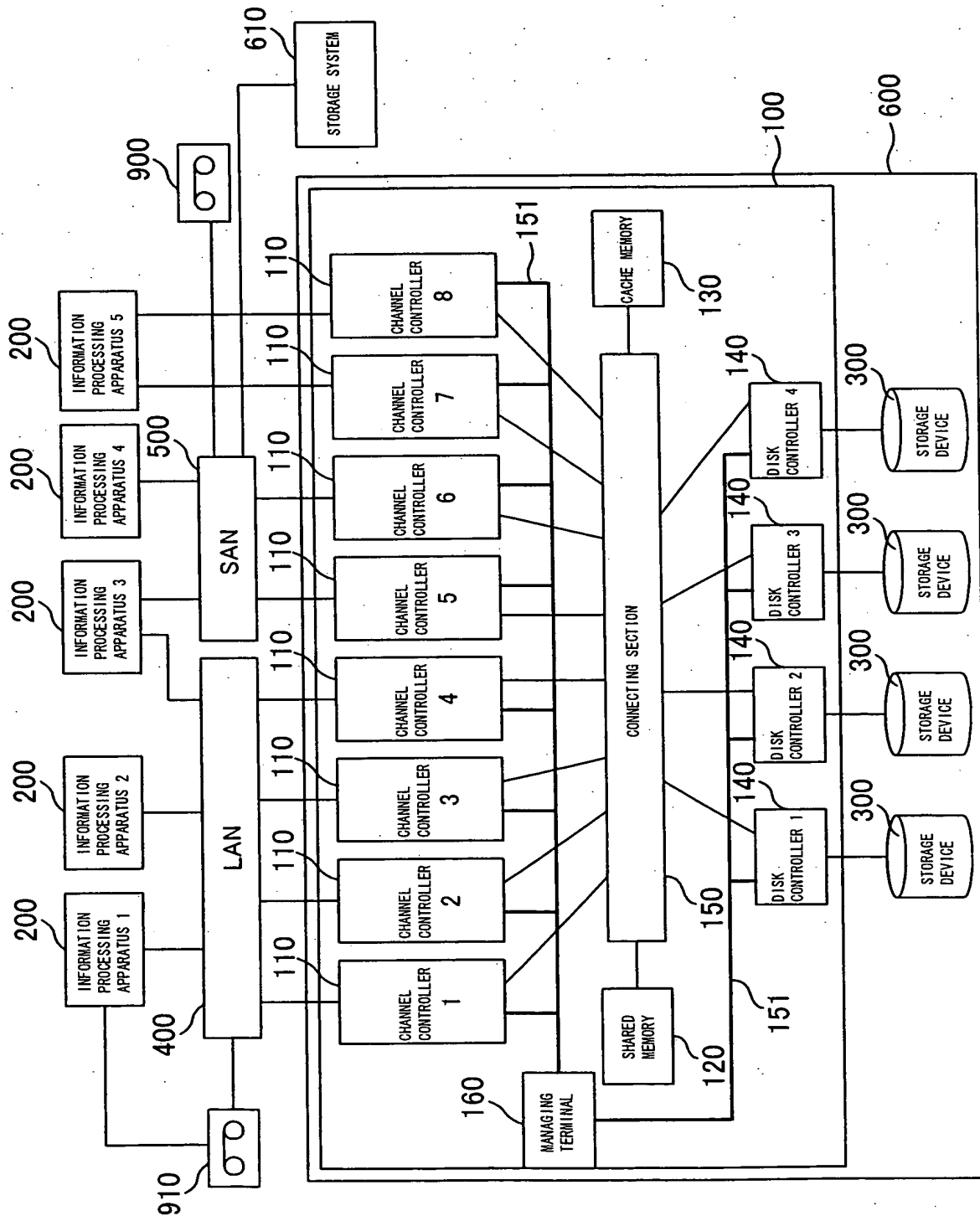
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FIG. 1

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FIG. 2

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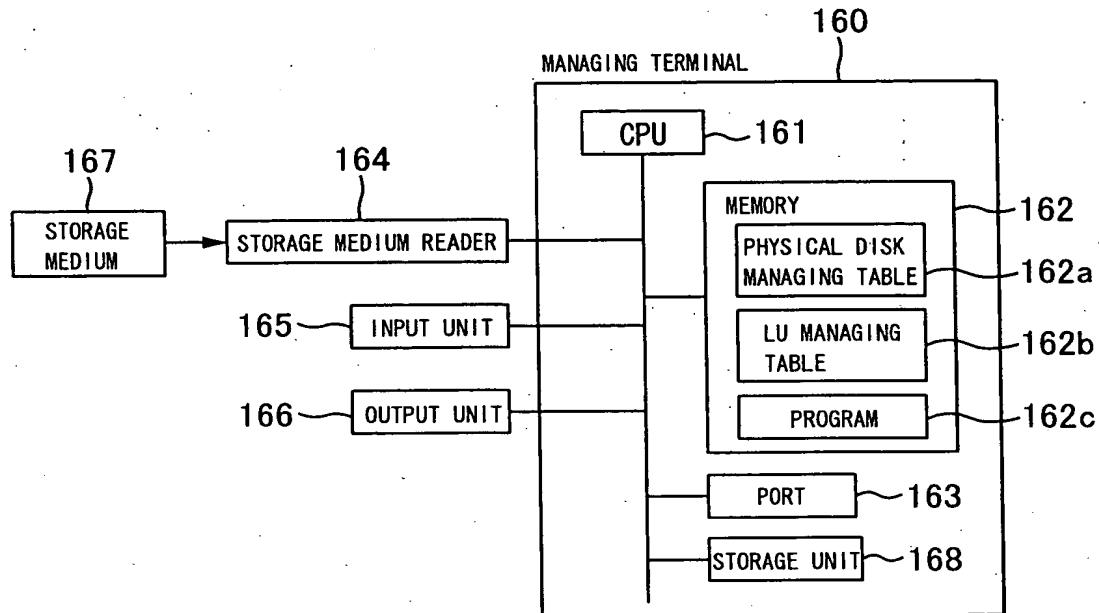


FIG. 3

162a

PHYSICAL DISK MANAGING TABLE

DISK NUMBER	CAPACITY	RAID	USAGE STATE
#001	100GB	5	USED
#002	100GB	5	USED
#003	100GB	5	USED
#004	100GB	5	USED
#005	100GB	5	USED
#006	50GB	—	UNUSED
⋮	⋮	⋮	⋮

FIG. 4

162b

LU MANAGING TABLE

LU NUMBER	PHYSICAL DISK	CAPACITY	RAID
#1	#001,#002,#003,#004,#005	100GB	5
#2	#001,#002,#003,#004,#005	300GB	5
#3	#006,#007,	200GB	1
⋮	⋮	⋮	⋮

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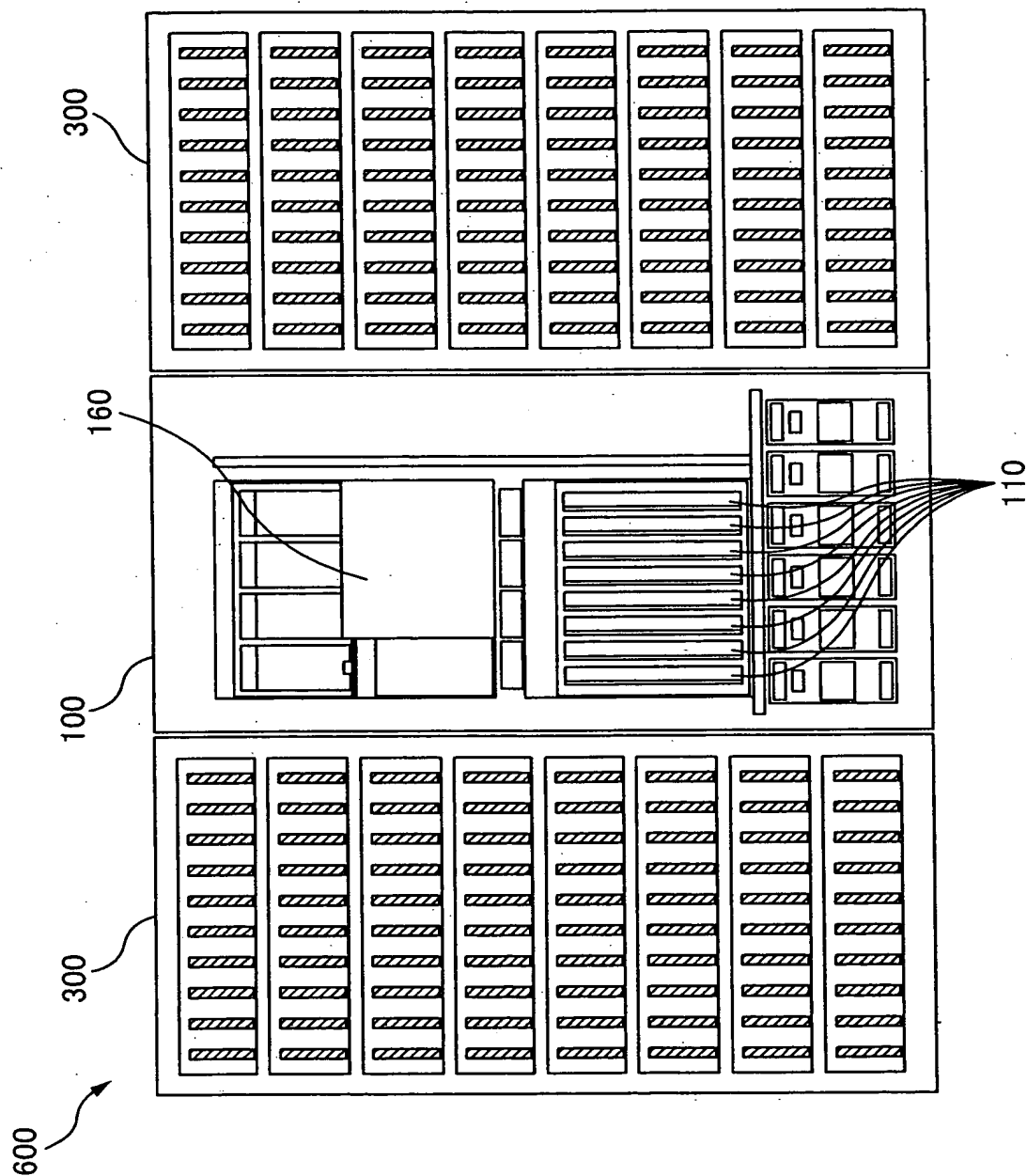
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FIG. 5

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FIG. 6

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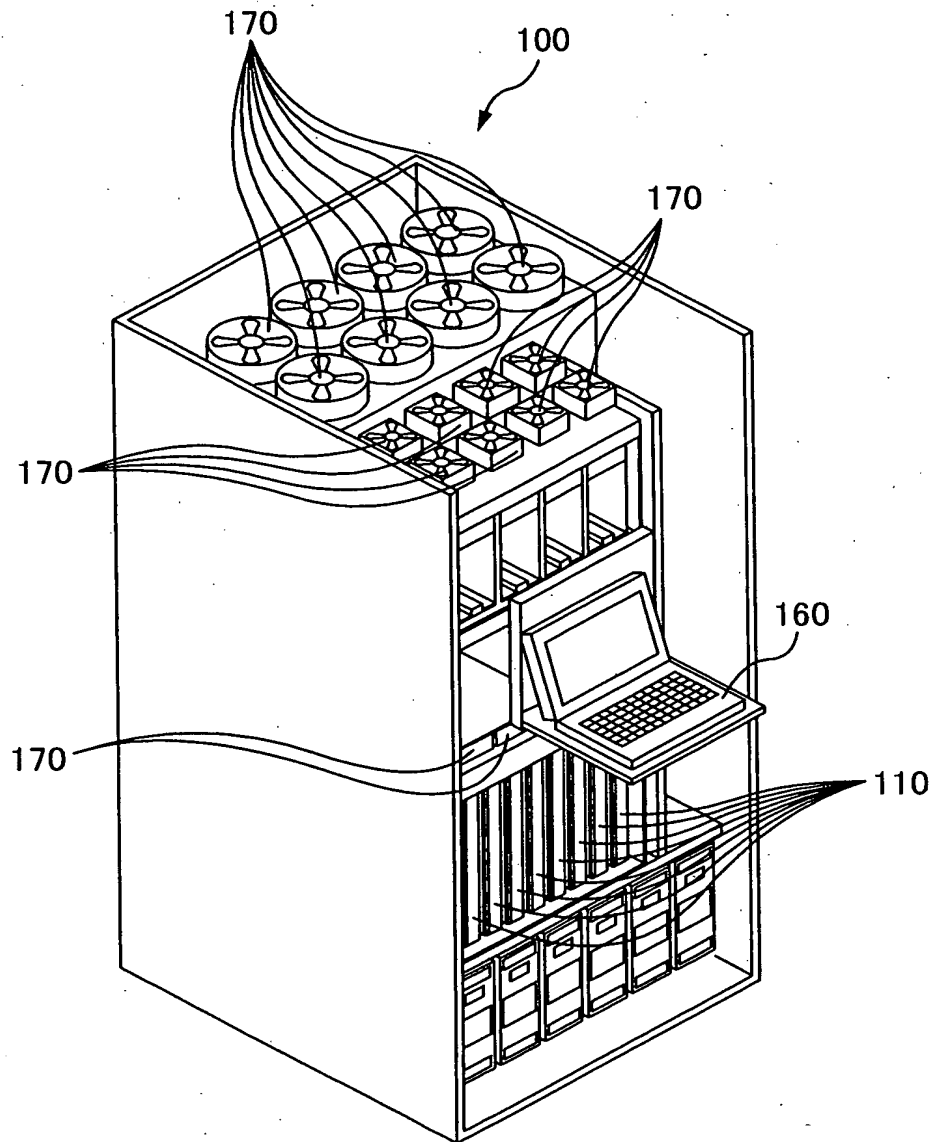


FIG. 7

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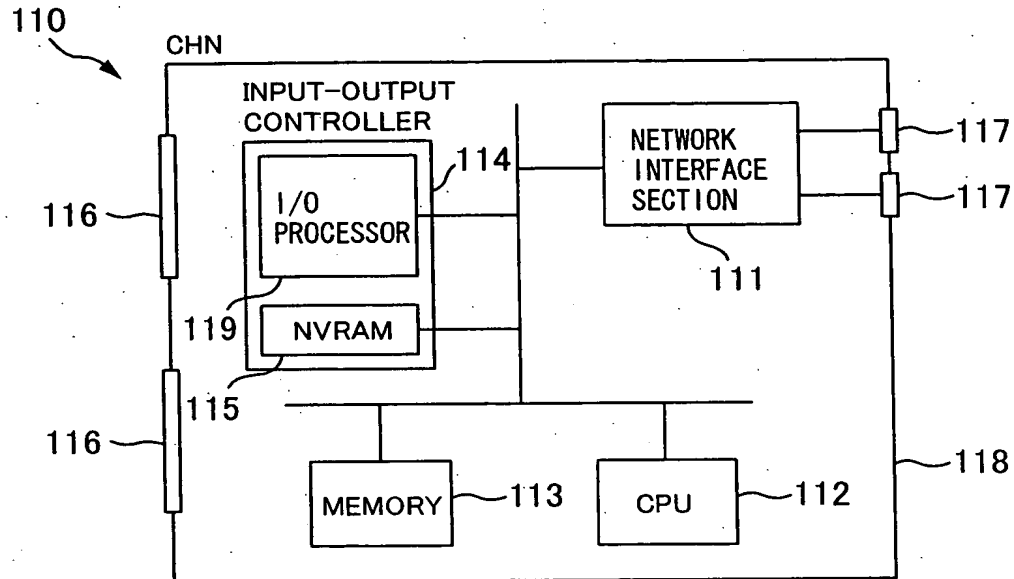


FIG. 8

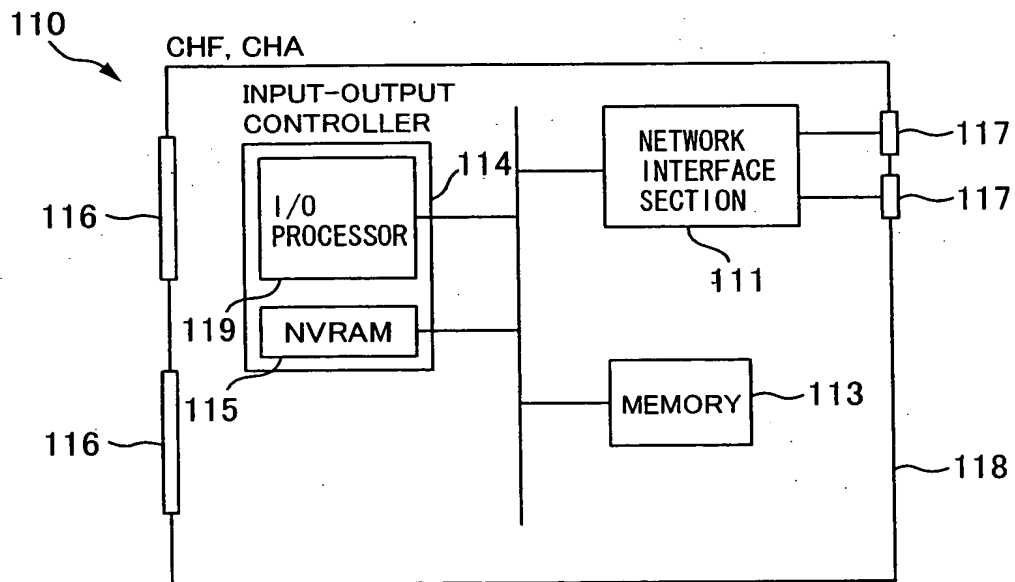


FIG. 9

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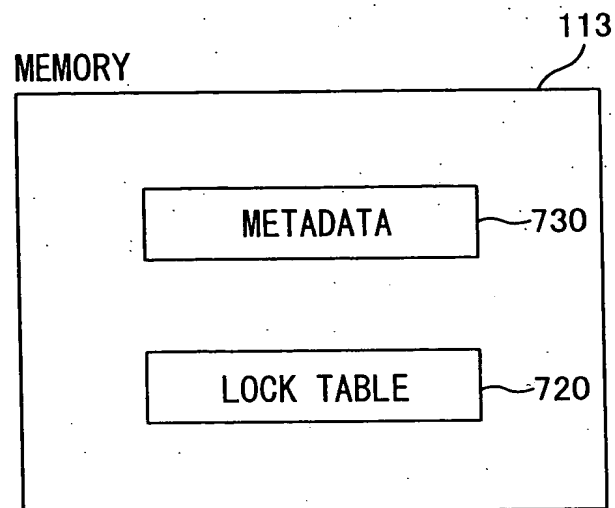
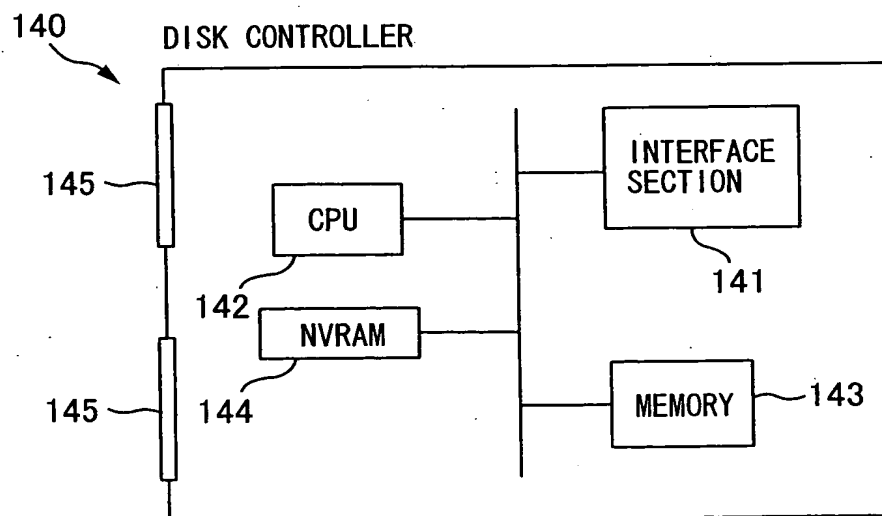


FIG. 10



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FIG. 11

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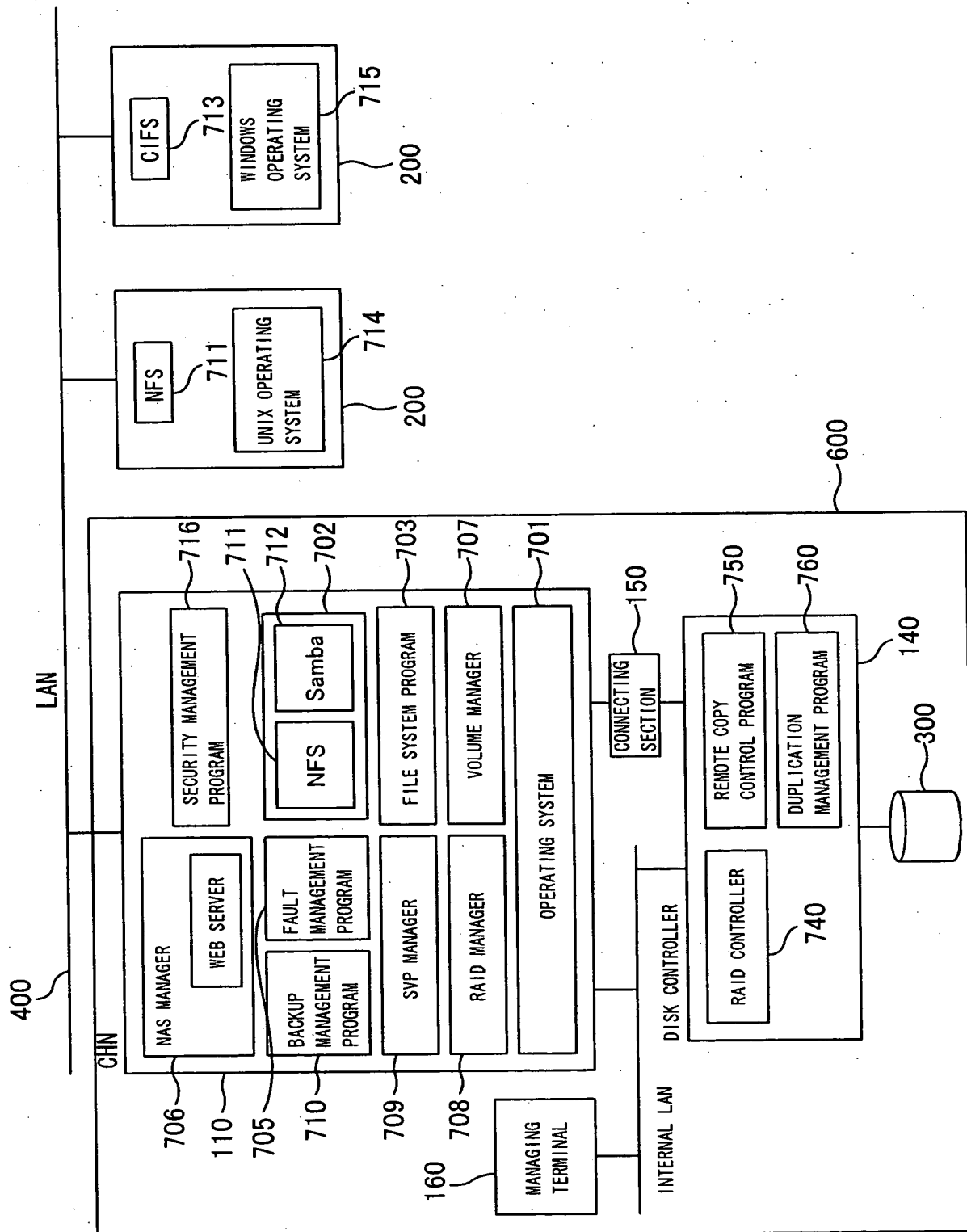
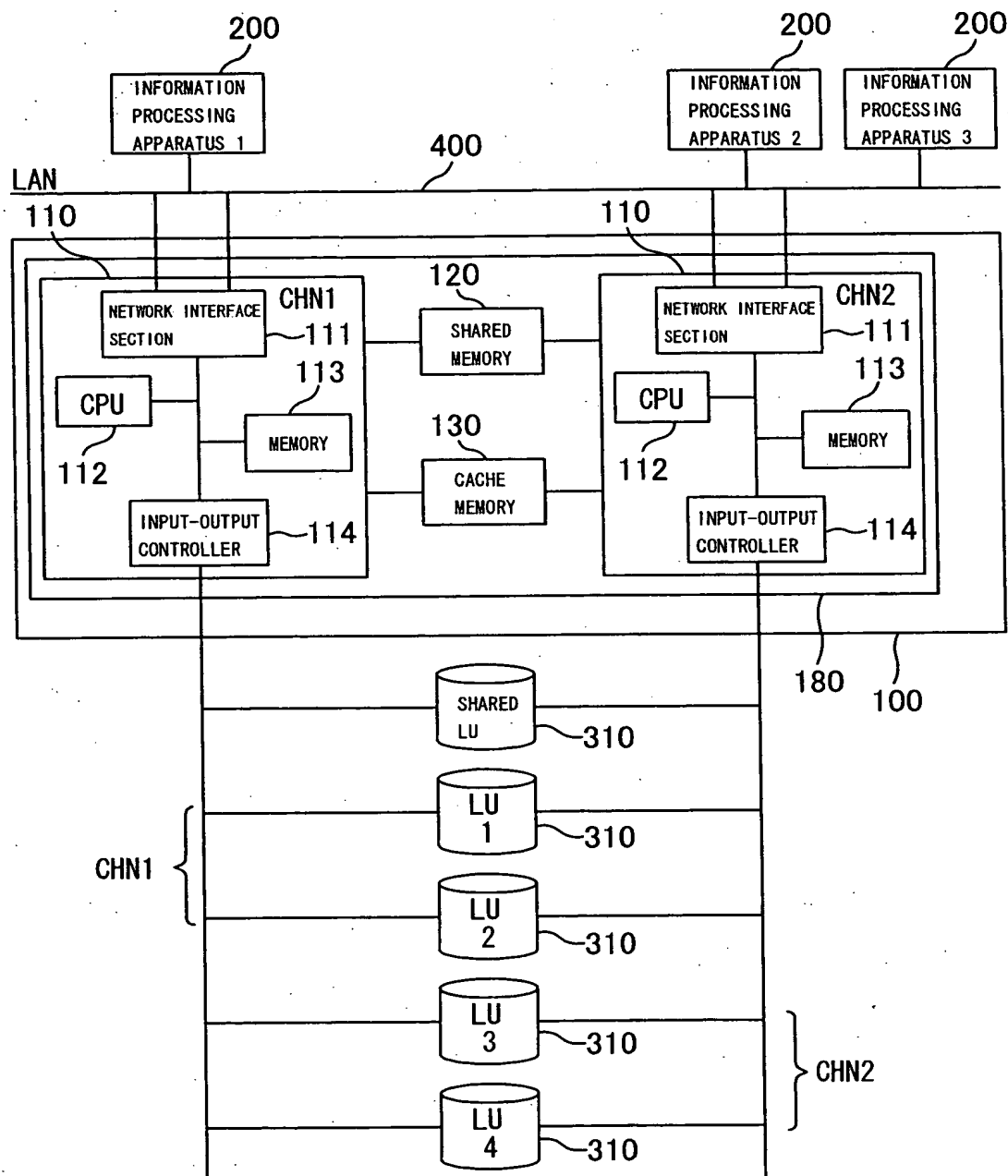


FIG. 12

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FIG. 13

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730

METADATA

FILE NAME	TOP ADDRESS	CAPACITY	OWNER	UPDATE TIME
A	7BSA	200MB	X	0 : 00
B	05BF	50MB	X	7 : 57
C	1F30	100MB	Y	9 : 15
D	470B	100MB	Z	15 : 20
⋮	⋮	⋮	⋮	⋮

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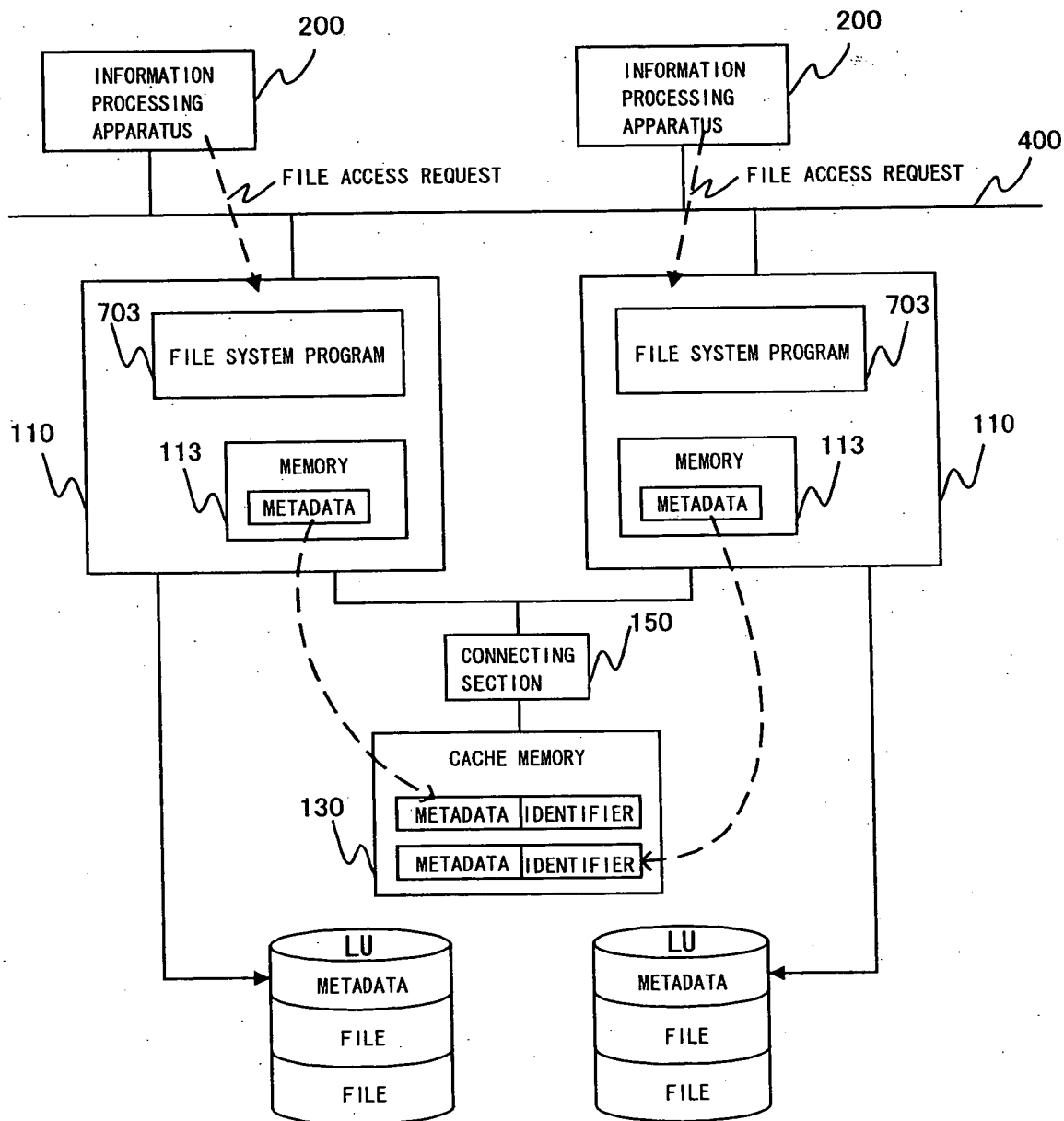
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FIG. 14

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FIG. 15

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721

FILE LOCK TABLE

FILE NAME	LOCK/UNLOCK
A	LOCKED
B	—
C	—
D	LOCKED
⋮	⋮

722

LU LOCK TABLE

LU	LOCK/UNLOCK
SHARED	—
1	LOCKED
2	—
⋮	⋮

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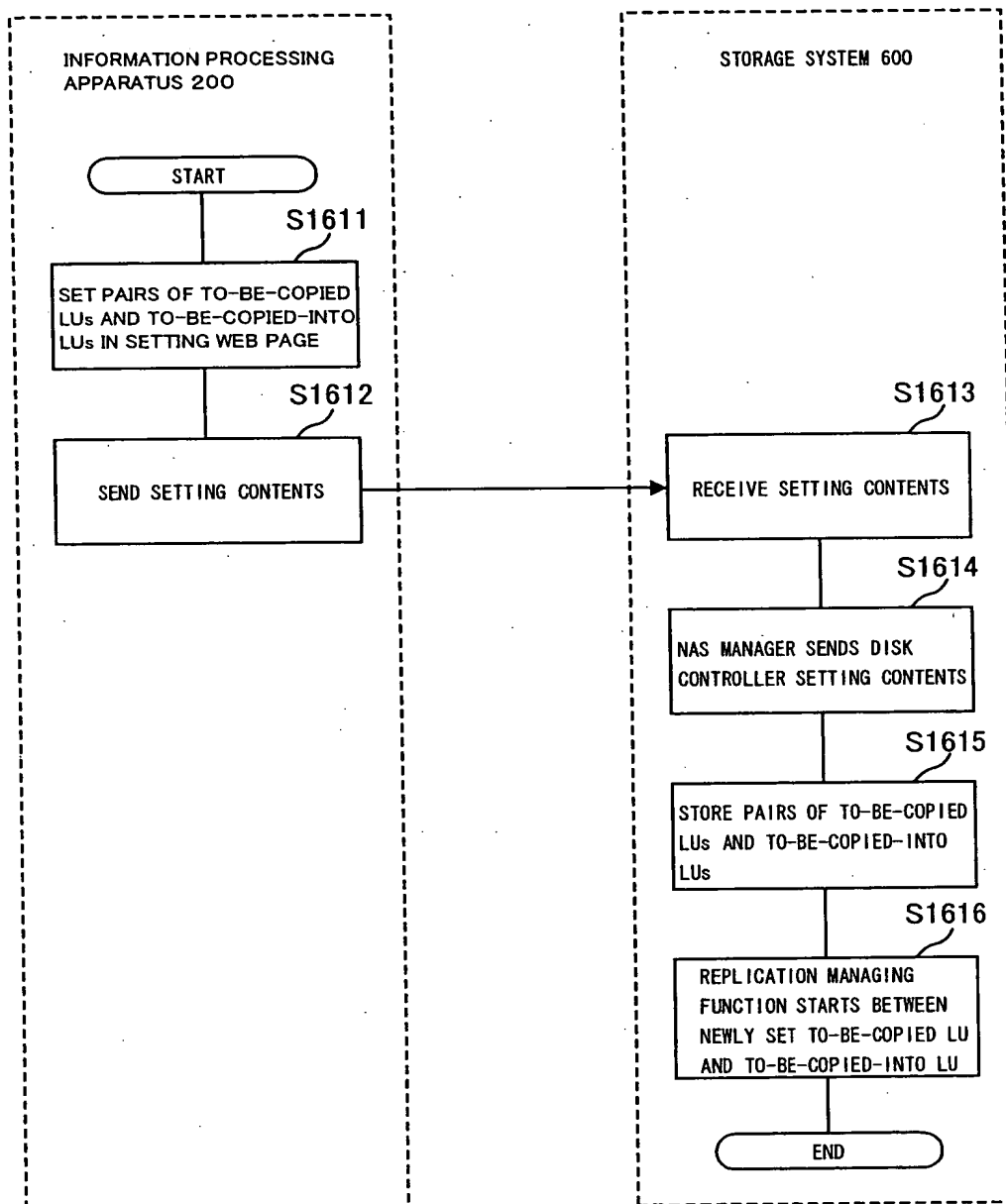
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FIG. 16

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FIG. 17

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1700

TO-BE-COPIED LU (LUN)	TO-BE-COPIED -INTO LU (LUN)
1	10
2	11
3	12
4	13
5	14

OK CANCEL

FIG. 18

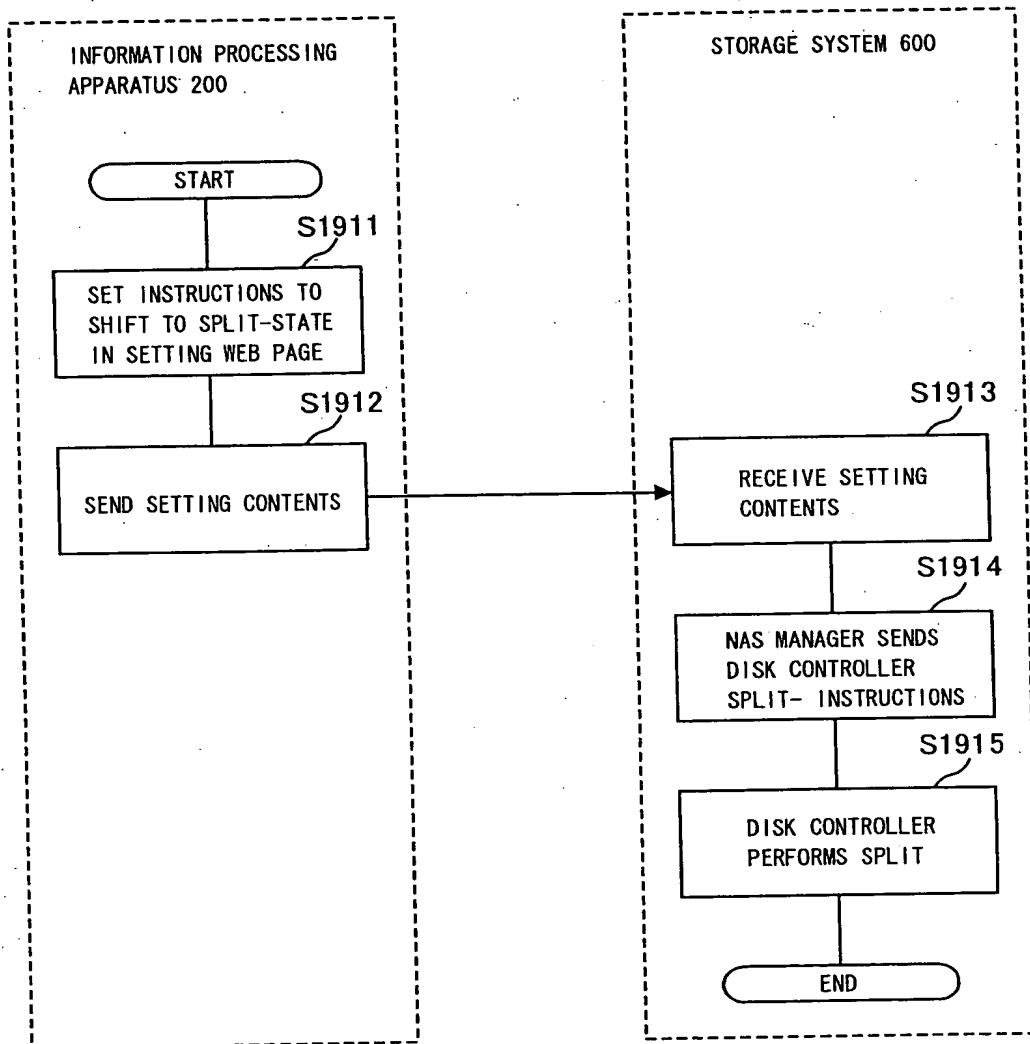
1800

TO-BE-COPIED LU (LUN)	TO-BE-COPIED -INTO LU (LUN)	SPLIT
1	10	EXECUTION ▼
2	11	▼
3	12	▼
4	13	▼
5	14	▼

OK CANCEL

FIG. 19

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FIG. 20

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2000

TO-BE-COPIED LU (LUN)	TO-BE-COPIED -INTO LU (LUN)	RE-SYNC
1	10	EXECUTION ▼
2	11	▼
3	12	▼
4	13	▼
5	14	▼

OK CANCEL

FIG. 21

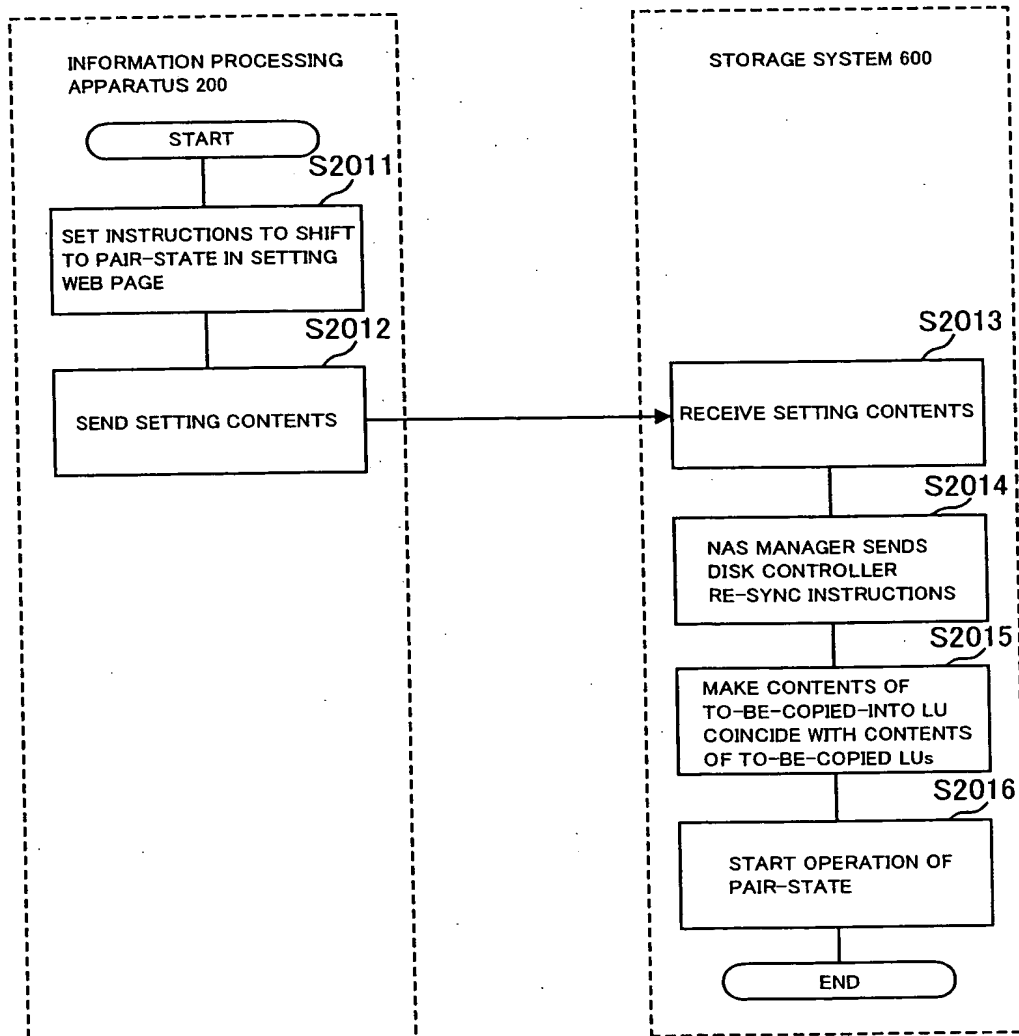


FIG. 22

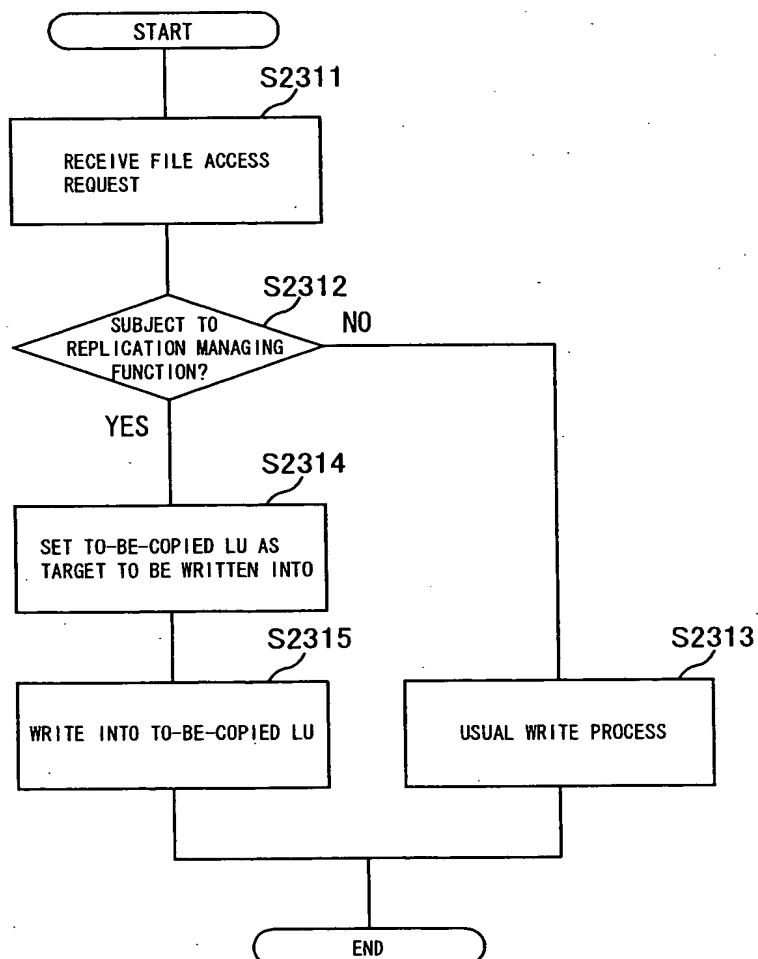
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2200

FILE NAME	DIRECTORY NAME
FILE 1	
FILE 2	
FILE 3	
FILE 4	

OK CANCEL

FIG. 23



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FIG. 24

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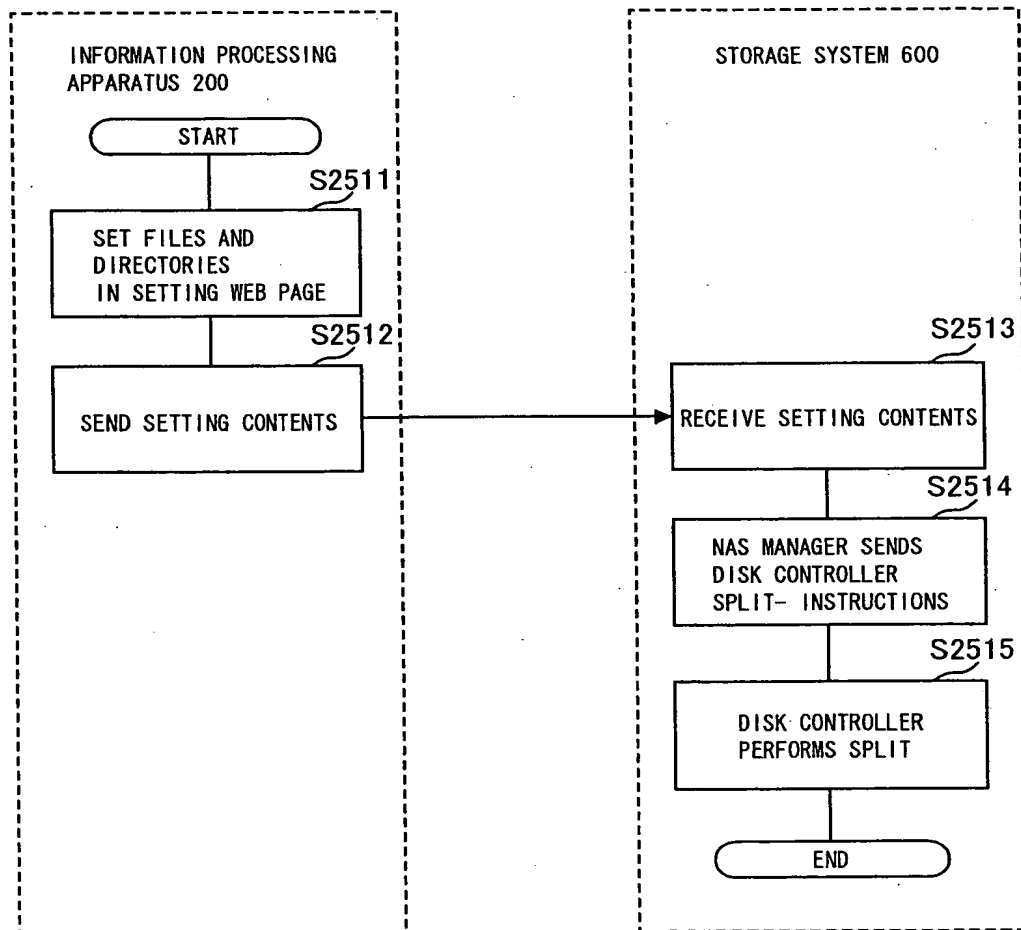
2400

FILE NAME	DIRECTORY NAME
FILE 1	
FILE 2	
FILE 3	
FILE 4	

SPECIFIED DATE/TIME	2003/1/30	1:00
	2003/1/30	2:00

OK CANCEL

FIG. 25



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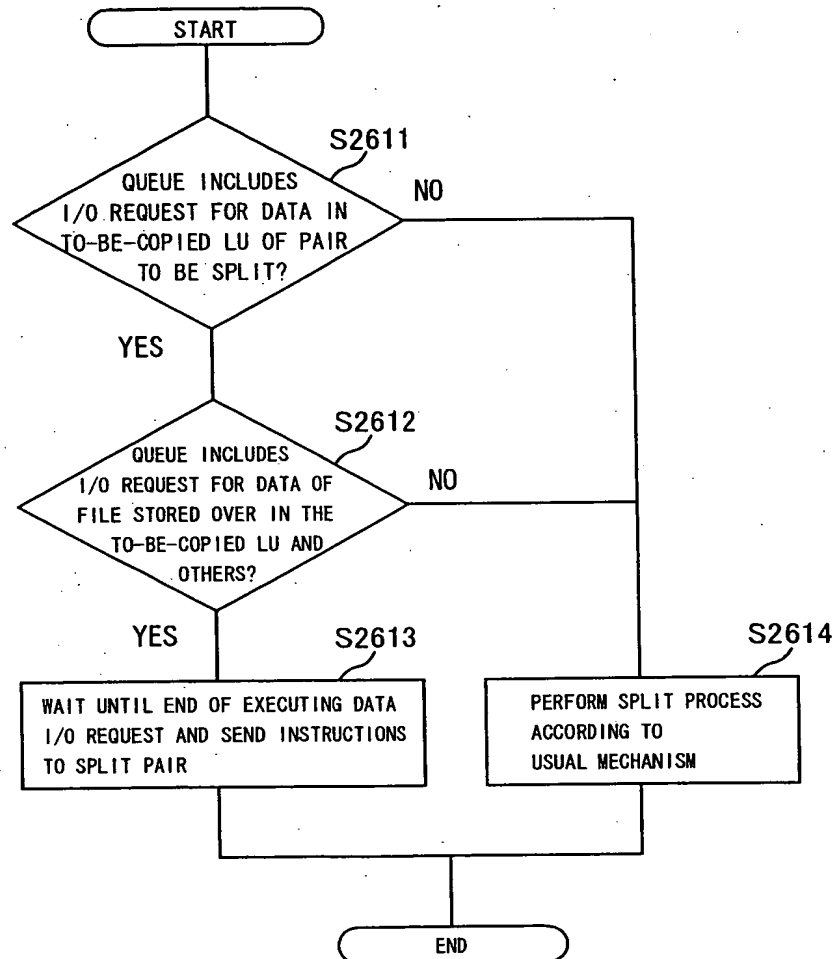
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FIG. 26

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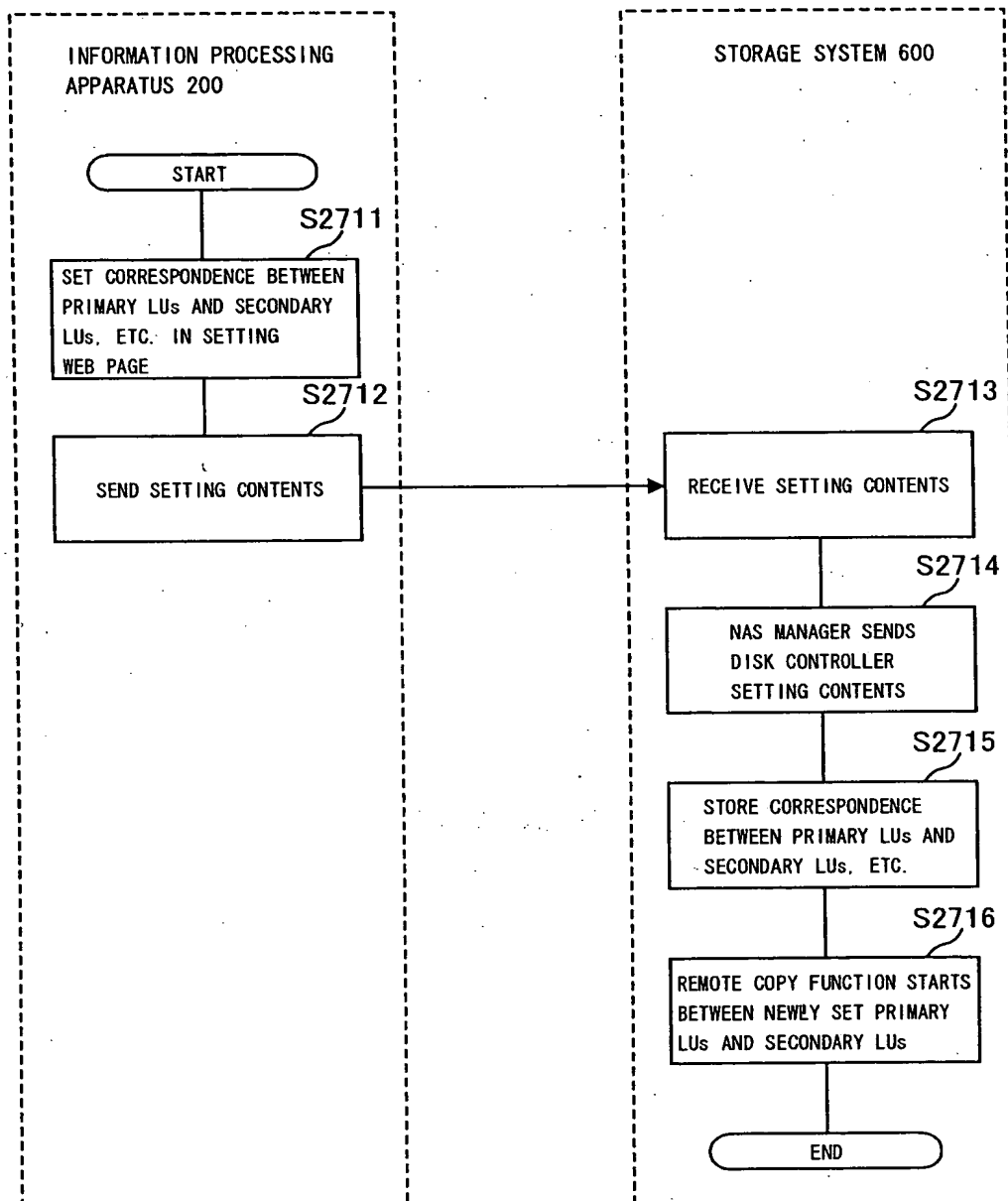
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FIG. 27

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FIG. 28

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2800

PRIMARY LU (LUN)	SECONDARY LU (LUN)	METHOD
1	10	SYNCHRONOUS ▾
2	11	ASYNCHRONOUS ▾
3	12	ASYNCHRONOUS ▾
4	13	ASYNCHRONOUS ▾
5	14	SYNCHRONOUS ▾

OK CANCEL

FIG. 29

2900

FILE NAME	DIRECTORY NAME
FILE 1	DIR 1
FILE 2	DIR 2
FILE 3	
FILE 4	

OK CANCEL

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FIG. 30

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